

Five habits for reliable biomanufacturing

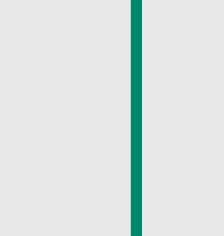
Taking measures to minimize unplanned downtime helps your production stay on schedule.

Use our checklist of best practices to increase reliability and resilience in your biomanufacturing process.



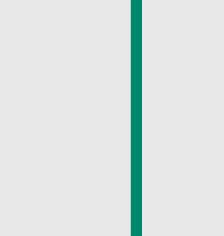
1 Set up and follow routine maintenance protocols

Applying best practices and basic care of your equipment plays an important role in increasing the long-term uptime and day-to-day efficiency of your manufacturing equipment. Leverage the instructions from the manufacturers and train your operators to perform routine maintenance tasks to keep equipment running reliably.



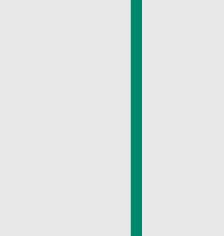
2 Upskill your teams

Your maintenance engineering team is your first line of defense during unplanned equipment outages. If your staff know how to pinpoint and resolve minor issues without outside support, then delays may be avoided. Work with your equipment vendor to enhance your first responders' knowledge and troubleshooting skills.



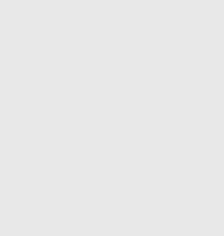
3 Keep spare parts on hand

Avoid letting logistical or supply chain challenges disrupt the flow of your manufacturing process. Keeping critical spare parts on hand is a relatively low-cost investment in a risk-based reliability program. Consult with your vendor to optimize your spare parts inventory and invest in a robust inventory management software.



4 Proactively maintain your equipment

Planned maintenance at defined intervals is a compliance requirement. Proactive equipment maintenance takes this a step further by performing condition-based maintenance, which helps avoid unplanned downtime and improves manufacturing economics. Enabling remote Internet of Things (IoT) connectivity with your equipment vendor can speed system repairs and possibly avoid them altogether.



5 Invest into Service Level Agreements (SLAs)

Your manufacturer's engineering expertise is critical when it comes to maintaining performance and uptime of your equipment. An SLA ensures fast access to this knowledge and helps you minimize the impact of downtime. Select hardware vendors with 24/7 support and advanced remote capabilities.